

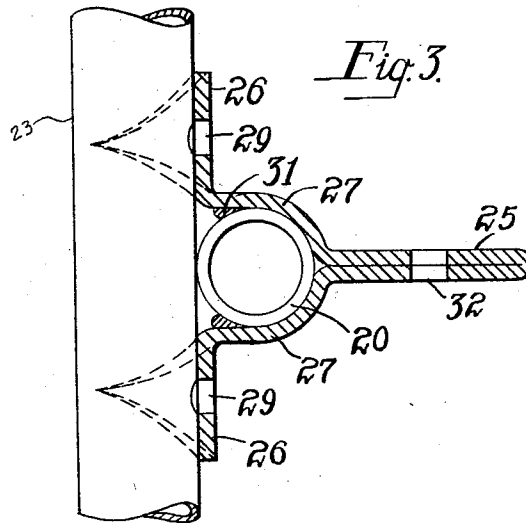
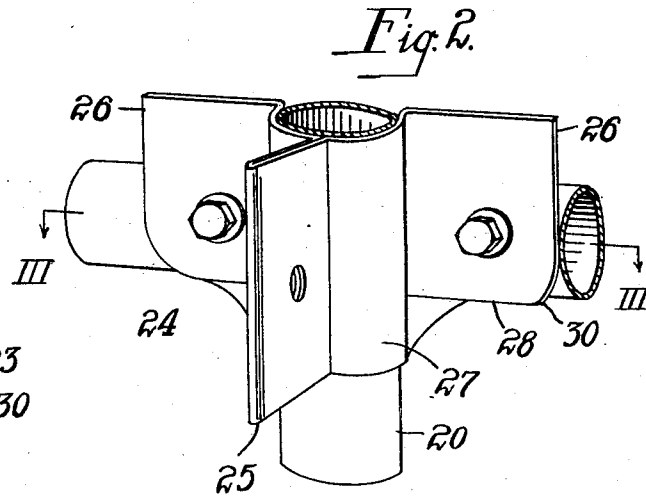
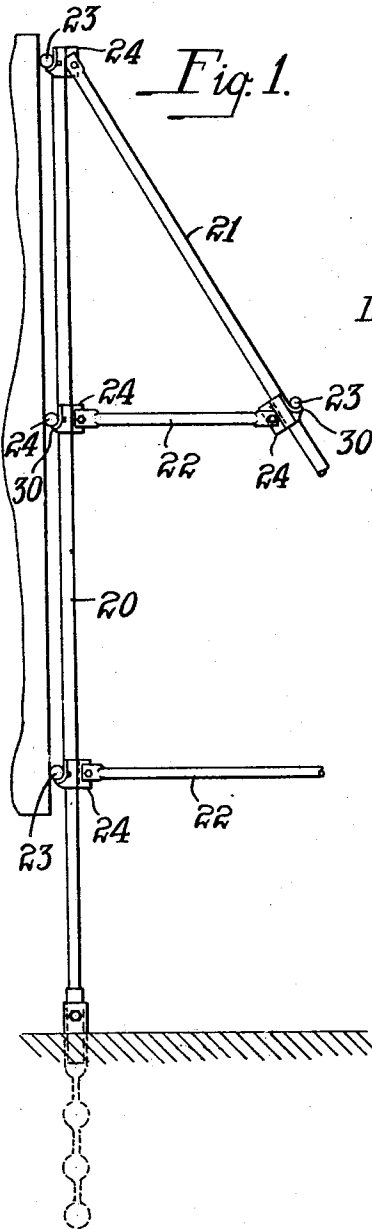
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C. E. WILLIAMS ET AL

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ADAPTER CONNECTER

Filed May 10, 1930



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UNITED STATES PATENT OFFICE

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ADAPTER CONNECTER

Original application filed September 9, 1929, Serial No. 391,226. Divided and this application filed May 10, 1930. Serial No. 451,308.

This invention relates to improvements in adapter-connecters for joining together sections of metal tubing in a poster panel framework, and is a division of our co-pending application, serially numbered 391,226, filed September 9, 1929.

Poster panel frameworks made of metal tubing are being used extensively at the present time for advertising purposes. In these frames, the adapter-connecters joining together the various sections of the metal tube do not in themselves give sufficient rigidity and sturdiness to the structure. Therefore, it is necessary to use diagonal bracings and struts to make the frame have the strength and firmness needed in such a panel. These diagonal bracings and struts add considerably to the cost of manufacturing and to the cost of erecting and dismantling the structure. They also increase the weight of the frame and make it necessary to use a heavy anchorage therefor.

An object of this invention is to provide an adapter-conneter for poster panel frameworks that will eliminate the need of diagonal bracings and struts.

Another object of this invention is to provide an adapter-conneter that will make integral the various sections of metal tubing forming the framework.

A further object of this invention is to provide an adapter-conneter for poster panel frameworks that will decrease the weight of the frame and facilitate the anchorage thereof.

A still further object of this invention is to provide an adapter-conneter for joining together the sections of metal tubing comprising a poster panel frame that will be easy to manufacture and economical of cost.

These and other objects which are readily apparent to those skilled in this particular art are accomplished by means of this invention, an embodiment of which is described in the following specification and illustrated in the accompanying drawings, wherein

Fig. 1 is a side elevational view of a metal poster panel structure embodying this invention;

Fig. 2 is a view in perspective of an adapter-conneter embodying the invention; and

Fig. 3 is a view in cross-section on line III—III of Fig. 2.

In Figure 1, a section of the framework of a poster panel is illustrated having main vertical members 20 which support cross members 23 to which the panels are hung making the front of the panel. The members 20 are maintained in their upright position by inclined members 21 which are fastened to the top of said vertical members. The members 21 may be upright or vertical as well as inclined, and it is understood that when "inclined member" is used hereafter, the term is to refer to the back bracing member which may be vertical, the word "inclined" being used throughout this description to distinguish from the vertical members 20. The said members 20 and 21 have girts 22 bolted to adapter-connecters 24 which are welded to said vertical and inclined members at regular intervals. The girts 22 bind together the vertical and inclined members and tend to strengthen the frame work. Our improved adapter-conneter 24 comprises a vertical flanged portion 25, vertical flanged portions 26 at right angles thereto and having intermediate circular segmental portions 27 disposed therebetween connecting the said flanged portions together. The circular segmental portions 27 of the connector are adapted to partially receive the main vertical members and the inclined members 21 and are of such size that the flanged portions 26 are flush with the face of the member received therein. The adapter-connecters are fastened to the vertical members 20 and inclined members 21 by placing a welding wire 31 at the junction of the circular segmental portions of the adapter-conneter and said members and in line welding along that wire. The lower edge 28 of the flange portions 26 are curved upwardly and in a direction opposite to the flanged portion 25 for forming a trough 30 for receiving the cross members 23. The flanged portions 26 are also provided with apertures 29 through which bolts extend for fastening the cross

members 23 in the trough 30 of the adapter-connector 24. The flanged portion 25 has an opening 32 therein through which the girts 22 are bolted to the adapter-connector.

It is readily seen from the above description that the troughs 30 at the bottom of the flanged portions 26 rigidly support the cross members 23 on each side of the vertical and inclined members 20 and 21 and prevent the shearing of the bolts, which extend through the openings 29 and hold the cross member 23 on the adapter-connector. The trough 30, therefore, holds the cross members 23 securely at right angles to the main and inclined or vertical members and a rigid frame is produced without the necessity of using diagonal bracings and struts therein. This elimination of diagonal bracings and struts reduces the weight of the framework making it easier to anchor. It also reduces the cost of erecting and dismantling the frame. Since the cross members are bolted to the flanged portions 26 and are supported in the trough 30 on each side of the vertical or inclined members a structure is secured that has the quality and strength of an integral structure. The adapter-connector 24 is best formed by stamping a piece of sheet metal in a die having suitable impressions for forming the various sections of the connector. It may be formed in one piece or of several separate pieces welded together.

While we have described our adapter-connector as applied to poster panels, it is to be distinctly understood that we do not limit ourselves to using the connector on this type of framework alone. It is also apparent that various changes, additions, substitutions and omissions can be made in this particular embodiment of our adapter-connector without departing from the spirit of this invention and the scope of the appended claims.

What we claim as new and desire to secure by Letters Patent is:

1. An adapter-connector for use in joining parts of metal framework comprising a flanged portion having an opening therein through which means are extended for fastening girts of the framework to the adapter-connector, flanged portions disposed at right angles to the first flanged portion having the lower edge curved upwardly and outwardly from said first-mentioned flanged portion for forming a support for cross members of the framework, said last mentioned flanged portion being provided with openings therein for receiving means for fastening the cross members in place, and intermediate circular segments connecting said first-mentioned flanged portion with the last-mentioned flanged portions.

2. An adapter-connector for joining metal tubing together for forming a framework comprising a circular portion adapted to par-

tially enclose the main members of said framework, portions extending at right angles from the ends of said circular portion having openings therein through which cross members of said framework are bolted thereto, troughs on the lower edge of said portions for bracing said cross members and eliminating diagonal bracing from said framework, and a portion extending rearwardly from said circular portion at right angles to said first mentioned portions for forming connections for the girts in said framework.

3. An adapter-connector for joining metal tubing together in the formation of a framework comprising a circular portion adapted to partially enclose the main members of said framework, flat portions extending from the ends of said circular portion having their outer faces flush with the outer surface of the enclosed member, means on said flat portions for securing a cross member of the framework thereto and troughs on the bottom of said flat portions adapted to brace said cross member on each side of said main member and to prevent shearing of the means securing said cross member to said flat portions.

4. An adapter-connector for joining metal tubing together in the formation of a framework comprising a circular portion adapted to partially enclose the main members of said framework, flat portions extending from the ends of said circular portion having their outer faces flush with the outer surface of the enclosed member, means on said flat portions for securing the cross members of the framework thereto, troughs on the bottom of said flat portions adapted to brace said cross members on each side of said main member and to prevent shearing of the means securing said cross members to said flat portions, and a flat portion extending rearwardly from said circular portion adapted to receive the girts of said framework.

5. An adapter-connector for joining metal tubing together for forming a framework comprising a circular portion adapted to partially enclose the main members of said framework, portions extending at right angles from the ends of said circular portion having openings therein through which the cross members of said framework are bolted thereto, troughs on the lower edge of said portions for bracing said cross members and eliminating diagonal bracing from said framework, and a portion extending rearwardly from said circular portion at right angles to said first mentioned portions adapted to form when in place a girt for said framework.

6. An adapter connector for use in joining parts of metal framework having a girt forming portion, portions at right angles to the girt forming portion having the lower edges thereof curved upwardly and away

from said girt forming portion for supporting a cross member of the framework, and intermediate circular segmental portions connecting said girt forming portion with said cross member supporting portions.

5 In testimony whereof, we have hereunto set our names this 8th day of May, 1930.

CHARLES E. WILLIAMS.
ALBERT W. BENDIG.

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